Plato—The Final Solution

Sunday, May 28, 2023

Some remember Plato's most famous problem, the Duplication of the Cube, for in trying to solve it, he conferred with other geometers and laid down Dialectic in Geometry, i.e., the straightedge and compass; noun and verb. However, neither he, nor those geometer's he knew could solve it. Eventually, academia gave up on it, they lost faith in Plato's belief that it could be solved, dialectically. As everything is factually dialectical, i.e., composed of only two parts, relatives and correlatives, it stands to reason the problem could be solved geometrically. Every proof that it cannot is provably gibberish. There is a reason Geometry is also known as Sacred Geometry, it is based on the fact that:

Adam and Eve are a Conjugate Binary Pair, whereby, Complete Induction and Deduction produces the human race.

Relative and Correlative, noun and verb, point and line, are a Conjugate Binary Pair, whereby, Complete Induction and Deduction produces everything a computer today demonstrates and demonstrated by every member of our Grammar Matrix, Common Grammar, Arithmetic, Algebra and Geometry.

Another item of interest to me is that although one had to have a lot of comprehension to understand Plato, one had recourse to one of his students, Aristotle, to lean on and help learn from what dialectic means and even what the name elements means in Euclid's, as the following examples show:

> "Further, since the ***matter*** exists, because it is ungenerated, it is a fortiori reasonable that the substance or essence, that which the matter is at any time coming to be, should exist; for if neither essence nor matter is to be, nothing will be at all, and since this is impossible there must be something besides the concrete thing, viz. the ***shape*** or ***form***.
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> "(By the matter I mean, for instance, the bronze, by the shape the pattern of its form, and by the compound of these the statue, the concrete whole.)" *Metaphysics*, by Aristotle.
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> "For we make it out of brass and the sphere; we bring the form into this particular matter, and the result is a brazen sphere." *Metaphysics*, by Aristotle.
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> "For the product will always have to be divisible, and one part must be this and another that; I mean the one must be matter and the other form." *Metaphysics*, by Aristotle.
>
> **"*how is the concrete thing these two elements*?"** *Metaphysics*, by Aristotle.

Imagine that, Aristotle was not trying to teach Aristotelean Logic, but Dialectic as well.

Here, try this:

> "For a thing will always have to be divisible, and one part must be this and another that; I mean the one must be Verb and the other Noun." *Metaphysics*, by Aristotle.

How are perceptible things these two elements? And why, when you use particular words to denote them, people do not even comprehend the part of speech each references? Point is to Noun as Line is to Verb.

Although Aristotle was trying, he could not actually figure it out. Phenomenal memory, but not very bright. Even today, you can get a PhD in philosophy, and not comprehend either Plato or Aristotle, in fact, you do not even have to remember what was said. This makes formal education actually worthless. One is not testified to by a piece of paper, purchased at great monetary expense, one is testified to by their work. Who have they ever made literate? As Plato noted, we can name relatives and correlatives, we cannot define them, as definition is the compound of them.

So, if you are in a huff, that I no longer use mechanical straightedge and compass and because of that you can claim it is not a Euclidean Figure, then you are using a computer, not pen and paper, so you are not using any known system of grammar. But, in all mercy; pen is to Verb as Paper is to Noun.

And so today, even though I posted the solution over two decades ago, our corporate academia has refused to publish it and I suspect that the reason is, I am self-taught; I am not a member of any academic school or community. Not only could geometers not solve this problem, I recently learnt that they did not even know how to multiply a line by a line, or divide a line by a line other than drawing rectangles and three-dimensional boxes. I find this situation rather sad; it demonstrates that they did not learn the fundamentals of arithmetic, algebra, or even common grammar; so I did an encyclopedic work in geometry showing how all math is done, even logic itself. I have to self-publish these also.

However, a real Philosopher does not care, as Plato stated, if truth comes from a rock or oak, as long as what it says is true. In that spirit, I make a further mention of the solution to Plato's searching for the ability to duplicate the Altar of Apollo; honored by the Altar at Delphi, called the Delian Problem with all my work in geometry which includes the Delian Solution, solved two ways. I simply clarify how the demonstration is based on two methods of constructing the ellipse which does the work. A real philosopher recognizes Plato's teaching, dialectic, exampled by the computer today, there are two and only two parts of speech, nouns and verbs, even for geometry.

Although I submitted the proof of concept, which no one would publish, in 1989 and proof of cube placement in the early 1990's and in fact, one can actually use the work done on cube placement as proof of construction, i.e., any segment can be cut into duplicate ratios, an infinite number of times, I say I solved the problem much later, in 1999. Why? Because performing the cube root placement has two methods, one direct, which takes the cube roots, but the other, produces the answers to the major and minor axis, etc., for the ellipse that does the job. I want a more complete understanding and demonstration. From the forward direction, there are two ways to solve it, the simple which gives one no intelligence about the ellipse itself, and then there is the complicated method which I had to figure out. So, one can produce the ellipse two distinct ways.

The figure, is then easy. The second one is rather complicated. If you have your own sound syst u can supply your own background music to the video, and

if you cannot decide on what music to play, I have included also, a flac file of the Grateful Dead's Ripple.

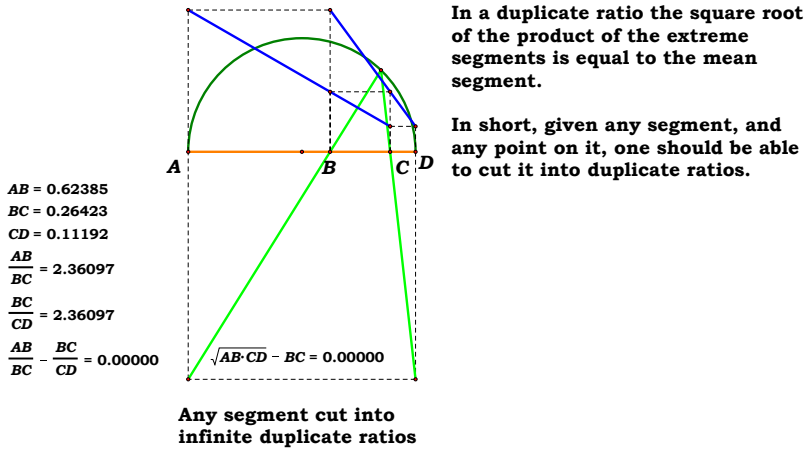
Revelation

What are the mistaken assumptions which made it appear to be unsolvable? It is the difference between an arithmetic progression and a geometric progression to begin with. In an arithmetic progression one first determines an arithmetic unit, they can then apply it to any length of line and any number of division that they like, proportional to the line, however, in a geometric progression one has to first determine the geometric unit, i.e., what ratio one wants the progression to display. Now, if you do it that way, then for any length of line, one can divide it into any number of geometric progressions they want and then select which ratio is going to be called an arithmetic unit, just like in an arithmetic progression, i.e., the first mistaken demand was to treat the constructions of the two as fundamentally different, but they are not.

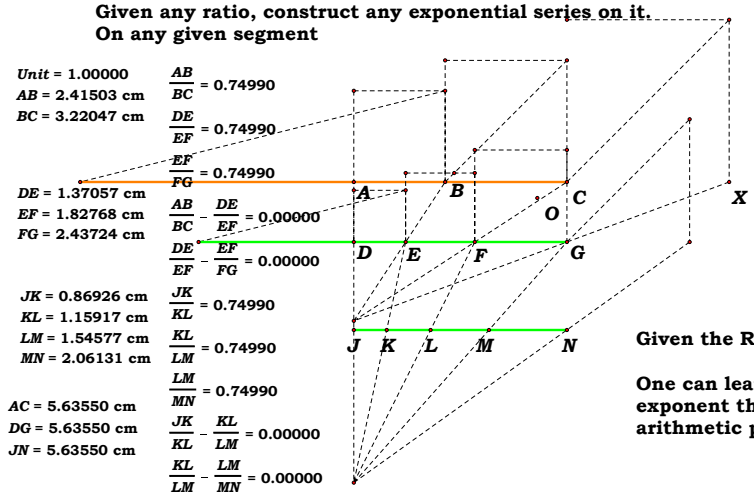
Conclusion

The Delian Solution is actually about dimensional progression, i.e., between any two steps in ratio, there is one, and only one difference which can be known. All one has to do is to apply the figure recursively to examine each step for any number of dimensions, one wishes to add into an equation and all of them can be shown, dissected, on a single surface, on paper to a computer screen, or even placed projected into a hologram.

Plates from video


In a duplicate ratio the square root of the product of the extreme segments is equal to the mean segment.
In short, given any segment, and any point on it, one should be able to cut it into duplicate ratios.
A
B
C
D
AB = 0.62385
BC = 0.26423
CD = 0.11192
AB/BC = 2.36097
BC/CD = 2.36097
AB/BC − BC/CD = 0.00000
√(AB·CD) − BC = 0.00000
Any segment cut into infinite duplicate ratios

Given any ratio, construct any exponential series on it.
On any given segment



Unit = 1.00000
AB = 2.41503 cm
BC = 3.22047 cm

$\frac{AB}{BC} = 0.74990$

DE = 1.37057 cm
EF = 1.82768 cm
FG = 2.43724 cm

$\frac{DE}{EF} = 0.74990$

$\frac{EF}{FG} = 0.74990$

$\frac{AB}{BC} - \frac{DE}{EF} = 0.00000$

$\frac{DE}{EF} - \frac{EF}{FG} = 0.00000$

JK = 0.86926 cm
KL = 1.15917 cm
LM = 1.54577 cm
MN = 2.06131 cm

$\frac{JK}{KL} = 0.74990$

$\frac{KL}{LM} = 0.74990$

$\frac{LM}{MN} = 0.74990$

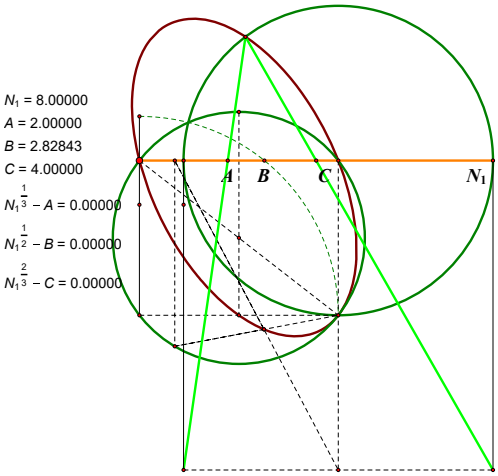
AC = 5.63550 cm
DG = 5.63550 cm
JN = 5.63550 cm

$\frac{JK}{KL} - \frac{KL}{LM} = 0.00000$

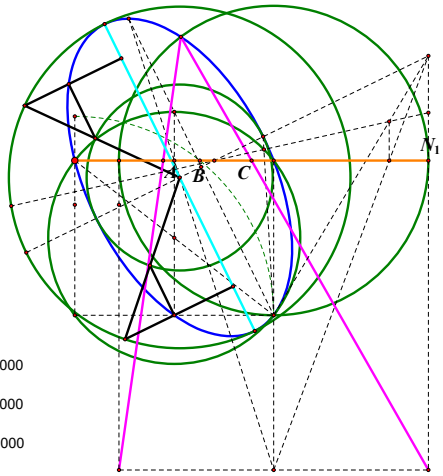
$\frac{KL}{LM} - \frac{LM}{MN} = 0.00000$

Given the Ratio AB to BC, etc

One can learn the ratio for any exponent through simple arithmetic progression.



N_1 = 8.00000
A = 2.00000
B = 2.82843
C = 4.00000
$N_1^{\frac{1}{3}} - A = 0.00000$
$N_1^{\frac{1}{2}} - B = 0.00000$
$N_1^{\frac{2}{3}} - C = 0.00000$



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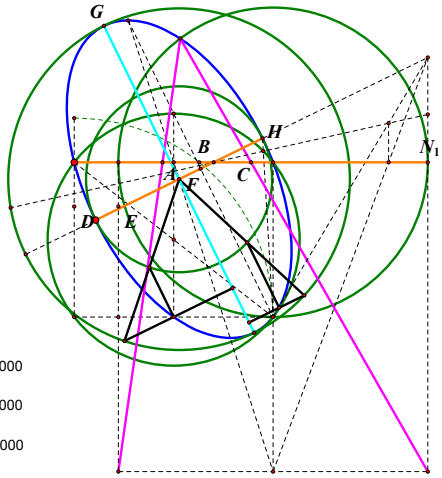

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$N_1^{\frac{2}{3}} - C = 0.00000$

DE = 1.16933 cm
FG = 4.51940 cm
FH = 2.45976 cm
FG = 3.86494
FH = 2.10356
$\frac{FG}{FH} = 1.83733$